## 0 is the Natural Rate of Interest with a Floating Exchange Rate

#### The Natural Rate of Interest:

# The risk free rate of interest without Government Interference

#### Who Has Floating Exchange Rates?

- US
- Japan
- Eurozone
- UK
- Canada
- Mexico
- Brazil
- OZ
- Etc.

#### The Central Bank Sets the Rate

- Central Banks set rates by decree.
- Market forces per se are not involved.

### Interest Rates Under Fixed Exchange Rates

- Storage charges
- Default risk
- Market forces set rates

### Why Govts. Must Borrow with Fixed Exchange Rates

- Protect reserves
- Liquidity preference
- Governments must compete with option to convert.

#### Imagine Yourself a Reserve Balance at the CB!

- You are a balance in a member bank reserve account.
- With a FIXED exchage rate you have THREE options before the close of business that day.
- 1. Remain a balance in that account
- 2. a. 'Switch' to a Govt. Sec. account
  b. 'Convert' to the reserve currency
- The Treasury competes with the option to convert when it sells securities.
- Interest rates are market determined.

#### Imagine Yourself a Reserve Balance at the CB!

- You are a balance in a member bank reserve account.
- With a FLOATING exchange rate you have TWO options before the close of business:
- 1. Remain a balance in that account
- 2. 'Switch' to a Govt. Sec. account
- The Treasury competes only with the option to remain a reserve balance when it sells securities.
- Interest rates are only set by the CB.

#### What if Govt. Spends and Doesn't Borrow?

- Govt. spending adds to member bank reserve account balances.
- These accounts are not interest bearing unless Govt. takes action to make them interest bearing.
- The interest rate on these bank accounts held at the Fed is 0 unless the Fed does otherwise.
- Govt. check don't 'bounce' whether or not interest is payed on reserve balances.

### What if Govt. Spends and Doesn't Borrow? (cont.)

- Govt. spending adds reserves.
- The 'penalty' for not selling securities and/or not paying interest on reserves is a 0 interest rate.
- Govt. checks will not 'bounce' either way.

#### Why Does the Govt. Issue Securities?

- Govt. securities function to provide interest bearing alternatives to non interest bearing reserve accounts.
- Govt. securities function to 'support' interest rates at a level above 0, and not to fund expenditures.

Without Govt. 'Interference' via the Issuing of Securities or the Paying of Interest on Reserves-

that 'NATURAL RATE' is 0!

### Ramifications of a ZIRP? (Zero Interest Rate Policy)

- Is Japan a 'special case?'
- A decade of zirp
- No cpi inflation
- No asset price inflation
- Appreciating currency
- High savings desires as evidenced by:
  - Ease of deficit spending
  - Ease of issuing long term securities at very low rates of interest.

#### More ZIRP Ramifications?

- Asset prices reflect a 'base case' for allocation of investment?
- Rentier income minimized?

### Further Reflections- how did we get to where we are today?

- Began with a fixed exchange rate system
- Interest rates were market determined
- Govt. interest rate management usually involved reserve management
- Data was accumulated on interest rates, inflation, growth, etc.
- When switching to a floating exchange rate system this was 'carried over?'

#### We are Paying the Price!

- Presumed budget constraints
- Disruptive monetary policies
- Destructive notions of 'Govt. Savings'

 All contribute the theoretical support of unemployment as a policy tool.